Statement of
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On behalf of
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On Spectrum Allocation and Third Generation Wireless Services
Before The Subcommittee on Communications
Committee on Commerce, Science, and Transportation
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Mr. Chairman and members of the Subcommittee, my name is Carroll D. McHenry. I am the Chairman and Chief Executive Officer of Nucentrix Broadband Networks, Inc. ("Nucentrix"), headquartered in Carrollton, Texas. Nucentrix is a facilities-based, last mile provider of broadband fixed-wireless Internet and multichannel video service over Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") spectrum in the 2.1 and 2.5 GHz bands. We are the third largest holder of MDS/ITFS spectrum in the United States, behind Sprint and WorldCom, with a coverage area of approximately 9 million homes in mostly rural communities across Texas, Oklahoma, Illinois, Missouri, and other states in the Midwestern United States. I am here not only on behalf of Nucentrix but also on behalf of Sprint, WorldCom and the thousands of ITFS licensees across the country who have joined forces to defend the MDS/ITFS spectrum. I have over 20 years of experience in the management and operation of telecommunications companies, including fixed wireless, mobile wireless and wireline telephone service providers.

Nucentrix's mission is to provide low-cost, reliable, broadband data and voice service in primarily rural markets. I am here to tell you that our mission has been seriously jeopardized because of

the cloud of uncertainty that hangs over our spectrum as a result of the government's efforts to find additional spectrum for third generation ("3G") mobile wireless services. This regulatory uncertainty has chilled investment and prevented the access to capital that is necessary for us to complete the build-out of our broadband networks.

I urge you to support our efforts to remove the MDS and ITFS bands from further consideration in the 3G proceedings. There are three compelling reasons for the Federal Communications Commission ("FCC") to take this action now. First, the extensive record developed by the FCC demonstrates that the MDS and ITFS bands are not appropriate for reallocation to 3G, and that 3G proponents overwhelmingly prefer spectrum *other* than MDS/ITFS for their services. Second, removing the regulatory uncertainty surrounding MDS/ITFS spectrum will bring renewed certainty and credibility to the spectrum management and auction policies of the FCC. Third, removing the MDS/ITFS bands from further consideration in the 3G proceedings will result in immediate and tangible benefits to the American public and provide, among other things, a competitive alternative to the digital subscriber line ("DSL") and cable modem services of the incumbent local exchange carrier ("ILEC") and cable duopoly, especially in rural America where few broadband options currently exist. I would like to talk briefly about each of these points.

THE RECORD AT THE FCC

MDS and ITFS spectrum has been the subject of extensive studies and proceedings for possible reallocation to 3G mobile wireless carriers for almost a year. During this time, the FCC has placed the spectrum under a microscope. The FCC staff issued an Interim Report on MDS and ITFS spectrum in November 2000, a Notice of Proposed Rulemaking in January 2001 and a Final Report in

March 2001. The FCC requested public comment on each of these items, and voluminous comments, reply comments and ex parte submissions were placed into the FCC record.

After months of study and analysis there is *nothing* in the FCC record that supports reallocating MDS/ITFS spectrum for 3G mobile service. Indeed, the Final Report released by the FCC staff on March 31, 2001 demonstrates conclusively that the fixed wireless services provided over MDS/ITFS spectrum should not be sacrificed for the benefit of 3G mobile services. I would like to highlight just a few of the findings from the Final Report for you today.

? The FCC staff found that the "MDS industry has invested several billion dollars to develop the band for fixed wireless data systems," and that "these systems will provide a significant opportunity for further competition with cable and digital subscriber line (DSL) services and deliver broadband services to rural America." *Final Report at 13.*

? The FCC staff acknowledged there was "no readily identifiable alternative frequency band that could accommodate a substantial relocation of the incumbent operations in the 2500-2690 band." It also found that relocation "to higher bands could affect significantly the economics of current and planned ITFS and MDS systems and lessen their ability to provide service in rural areas or smaller markets." *Final Report at iii.*

? With regard to "segmenting" or dividing the bands for 3G services, the Final Report found that "delivery of fixed broadband wireless services to the public and educational users would be delayed, and in rural areas or smaller markets, may never be realized." *Final Report at 92-93.*

? The FCC determined that sharing the MDS and ITFS bands with 3G systems was technically infeasible. *Final Report at 36.*

? And finally, regarding the educational licensees with whom we share our spectrum, the FCC staff found that such licensees "make extensive use of their spectrum to provide formal classroom instruction, distance learning, and video conference capability to a wide variety of educational users throughout the nation." *Final Report at 13*.

In addition to these findings, the record established at the FCC shows that the MDS/ITFS bands are not the preferred bands for 3G services. Rather, the record demonstrates that the 3G community prefers the 1.7 GHz band allocated for government use. In addition, there is other spectrum in a wide variety of bands that may be considered for 3G services, including the 700 MHz, 2110-2150 MHz and 1990-2025/2165-2200 MHz bands. Given that nothing in the FCC record credibly supports reallocation of our bands, that 3G proponents prefer other parts of the spectrum and that the FCC may identify alternative spectrum for 3G services, I respectfully submit that there is no good reason to continue to hold our spectrum hostage and further delay a decision while the FCC explores other more desirable options.

SPECTRUM MANAGEMENT

A second reason for removing MDS/ITFS spectrum from further consideration for 3G services is that it will bring renewed certainty and credibility to the FCC's spectrum management and auction policies. A bit of history about MDS and ITFS spectrum will help put this point into perspective.

As originally licensed, MDS and ITFS spectrum was used primarily for one-way analog video programming. Commercial MDS providers, including Nucentrix, used the spectrum to provide so-called "wireless cable" services to consumers, and their educational ITFS partners used the spectrum to deliver one-way educational programming to classrooms.

However, in late 1998, after a lengthy and complex rulemaking proceeding, the FCC issued new rules that would permit MDS/ITFS licensees to use their channels for a wide array of digital two-way data, voice and video services. The new FCC rules marked a significant milestone in the evolution of our spectrum. Among other things, these new two-way rules were intended to spur competition in the market for high-speed Internet access and data communications services. They were also intended to help ITFS licensees whose educational needs increasingly required broadband access.

In reliance on the FCC's rules and policies, the MDS industry invested *billion*s of dollars acquiring spectrum, preparing and filing complex two-way license applications with the FCC, developing next generation equipment, and planning and building the infrastructure needed to offer broadband wireless service to the public. In August of last year, Nucentrix filed over 400 applications with the FCC to provide broadband service in 70 markets. Just a few months ago, we began to receive FCC licenses for these markets, and now have approval for over 90% of our applications filed, covering more than 60 markets.

The issuance of these licenses *should* be good news for Nucentrix and the millions of residents and thousands of businesses in our service areas. However, the news is not good because the cloud of uncertainty that hangs over MDS and ITFS spectrum as a result of the search for more 3G spectrum has chilled the capital investment Nucentrix needs to build new networks in unserved and underserved communities. Protracted uncertainty may chill investment permanently.

This is fundamentally unfair. The FCC *encouraged* companies like Nucentrix to invest in MDS/ITFS spectrum and networks. The FCC e*ncouraged* educators, commercial service providers and equipment manufacturers to invest in the very expensive conversion of this spectrum from one-way

analog video to two-way digital broadband service. Now, just as the services contemplated by the FCC are being rolled out, we are frozen in our tracks because the 3G proceeding has chilled the capital investment we need to build out our networks. After months of study and no support for continuing to include MDS/ITFS spectrum in the FCC proceedings, the MDS/ITFS community deserves a resolution of this issue.

Mr. Chairman, there is another problem that I must mention. Nucentrix and other commercial operators purchased many of their MDS licenses at auction. Among other things, we paid for the exclusive right to provide fixed wireless services within our Basic Trading Areas. We are now facing the possibility of losing the licenses we purchased at auction mid-way through the term of the authorizations, and only months after receiving licenses for two-way digital services. If winning bidders at spectrum auctions cannot be guaranteed, with reasonable certainty, that the government will honor its commitments and allow them to operate their licenses for the full term, the credibility of the auction process will be irreparably destroyed. Certainty and stability must be maintained in formulating and implementing spectrum management policies.

PUBLIC BENEFITS

A third reason for removing our spectrum from further consideration is that such action will provide immediate and concrete benefits to the American public.

Competition and Broadband to Rural America. Removing MDS/ITFS spectrum from further consideration in the 3G proceeding will unleash a compelling competitive alternative to the ILEC-DSL and cable duopoly, especially in rural America, consistent with the mandate of Congress in the 1996 Telecommunications Act. The fixed wireless systems being deployed by Nucentrix and other

MDS operators can cover up to a 3,800 square mile area from a single tower and offer symmetric transmission speeds of between 256 Kbps to 1.5 Mbps. These vast coverage areas and high data rates are ideal for serving rural areas that, in many cases, are unable to receive any wireline broadband service offerings.

The FCC recognized the unique opportunity provided by MDS and ITFS spectrum in a November 2000 report, when the FCC stated that in rural or otherwise underserved markets in this country, ITFS and MDS licensees may be the sole provider of broadband service. In a report to the Texas legislature in January 2001, the Texas PUC concluded that the last mile to the residential customer remains the largest constraint on the availability of broadband services, particularly in rural areas where low population densities and longer distances make it too expensive to deploy wireline services. The Texas PUC also found that (i) there are no competitive local exchange carriers providing DSL access lines in rural areas in Texas, (ii) ILECs have largely ignored rural subscribers and (iii) only 5% of rural counties in Texas have cable modem service.

Five years after passage of the Telecommunications Act of 1996, the availability of affordable broadband in rural America remains limited. In our markets like Midland and Tyler, Texas, Tulsa and Stillwater, Oklahoma, Columbia and Springfield, Missouri, and Champaign and Peoria, Illinois, consumers and small businesses have few, if any, affordable broadband options. In markets like these, Nucentrix's fixed wireless service is likely to be the *only* broadband service available to many of the homes, offices, schools, hospitals, and community centers for the foreseeable future.

To date, the chief way alternative broadband service providers could compete with the ILEC and cable duopoly was to buy services from their competitor and resell them. That model has failed as

many competitive local exchange carriers have gone bankrupt or closed their doors. As competition has dwindled, consumer prices have risen. Recently, several of the large ILECs announced simultaneous price increases of up to 25% for their DSL service. These ILECs also have mobile wireless affiliates that demand more spectrum for 3G services. Without a facilities-based competitive broadband alternative that can completely bypass the ILEC-DSL and cable facilities, like fixed wireless, the duopoly has no incentive to lower prices. The benefits of competition in the broadband services market will not be realized without an alternative to the services offered by the duopoly. Fixed broadband wireless services offered in the MDS/ITFS spectrum can be that alternative.

Equal Access To Information Technology. Facilitating the deployment of fixed wireless services in the MDS/ITFS bands also promotes equal access to all information technology for all Americans. The dramatic difference in broadband access between urban and rural America, and between affluent and poor Americans, has been identified and addressed in a series of NTIA publications. NTIA estimates that those who are poor and live in rural areas are about 20 times more likely to be left behind than wealthier residents of urban areas. As I mentioned earlier, in Texas for example, where approximately one-third of Nucentrix's markets are located, there are no competitive local exchange carriers providing DSL access lines in rural areas, and ILECs have largely ignored rural subscribers. The deployment of advanced fixed wireless services in the MDS/ITFS bands will help close this information technology gap.

Important Educational Initiatives. Finally, rapid deployment of broadband services in the MDS/ITFS bands will help ensure the success of the important educational initiatives that are currently underway. Nucentrix has over 400 ITFS partners, consisting primarily of local independent school

districts, small colleges and universities and faith-based educational organizations in rural areas. Nucentrix and other MDS operators contribute directly to the support of education, and supply the infrastructure to enable schools to satisfy their broadband and distance learning requirements. Today, by incorporating broadband technology into their curricula, educators are building plans to deliver multimedia, interactive, self-paced instruction to students at all levels and in all settings – urban and rural, rich and poor.

WE NEED YOUR HELP

I want to thank you for holding this important hearing. I realize that the FCC, Congress and the Administration are faced with critical and complex decisions regarding how best to accommodate spectrum capacity demands of constantly evolving wireless technologies. Nucentrix does not disagree that some amount of additional spectrum may be necessary for transitioning existing mobile services to the 3G standard in the future. However, we do not believe that finding additional spectrum should come at the expense of fixed wireless broadband services that provide the only feasible solution for providing ubiquitous broadband service throughout the United States and that support the critical educational programs of our ITFS partners.

I respectfully ask for your support to remove the MDS/ITFS bands from consideration in the 3G proceedings. The record at the FCC simply does not support reallocation or relocation of these bands for 3G. Yet, the regulatory uncertainty that hangs over this spectrum has shut down new investment and prevented companies like Nucentrix from building out broadband networks in rural and underserved communities. Please, don't allow the important broadband and educational services being provided over this spectrum to continue to be held hostage to efforts to find more spectrum for

commercial 3G services.

Thank you for the opportunity to testify today.